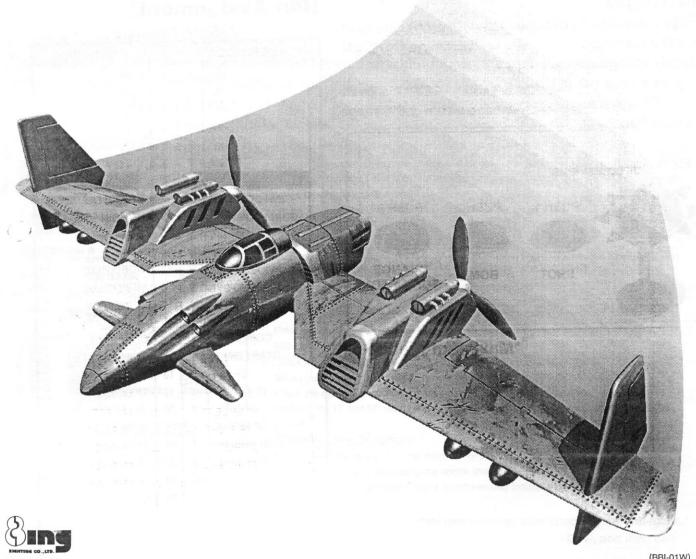


OPERATOR'S MANUAL



[Important Safety Instructions]

- Turn off power before installation and removal of the circuit board.
- Turn off power before changing the setting of any DIP switch.
- · Use board edge connectors that conform to the JAMMA standard.
- Do not touch the heat sink or components when you hold the board since the heat sink and some components are very hot.
- · Set the board so that the heat sink is always well ventilated.
- · Avoid strong physical shock on the board and do not get it wet.
- · Do not disassemble or rebuild the board.

[Contents]

Manual

(BBI-01W)

1 copy

Instruction card

(BBI-02W)

1 copy

· Circuit board

1 board

[Settings]

· Edge connector on circuit board JAMMA Standard

Monitor Direction

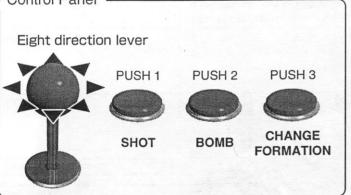
VERTICAL SCREEN

· Supply voltages to the board

+5V(2A or greater) +12V(1A or greater)

(Maintain each voltage within $\pm 5\%$ range.)

· Control Panel -



*Maximum credits-9.

168

[Pin Assignment]

JAMMA Standard

JAIVIIVIA Statidard									
SOLDER SIDE			PARTS SIDE						
GND	Α	1	GND						
GND	В	2	GND						
+5V	С	3	+5V						
+5V	D	4	+5V						
N.C.	E	5	N.C.						
+12V	F	6	+12V						
	Н	7							
COIN COUNTER 2	J	8	COIN COUNTER 1						
(COIN LOCK OUT 2)	K	9	(COIN LOCK OUT 1)						
SP(-)	L	10	SP(+)						
N.C.	М	11	N.C.						
VIDEO GREEN	N	12	VIDEO RED						
VIDEO SYNC	Р	13	VIDEO BLUE						
SERVICE SW	R	14	VIDEO GND						
N.C.	S	15	一般场所						
COIN SW 2	Т	15	COIN SW 1						
START SW 2	U	17	START SW 1						
2P UP	V	18	1P UP						
2P DOWN	W	19	1P DOWN						
2P LEFT	Х	20	1P LEFT						
2P RIGHT	Y	21	1P RIGHT						
2P PUSH 1	Z	22	1P PUSH 1						
2P PUSH 2	а	23	1P PUSH 2						
2P PUSH 3	b	24	1P PUSH 3						
N.C.	С	25	N.C.						
N.C.	d	26	N.C.						
GND	е	27	GND						
GND	f	28	GND						

[Test Mode]

To enter test mode, set DIP switch 1-1 on the board ON, and then turn on power.

Caution: Turn off power before changing the setting of any DIP switch.

Select a test item by moving the 1P lever to the appropriate vertical position and press the 1P PUSH1. The screen for the selected test item appears.

BATTLE BAKRAID

> GAME MODE
DIP SWITCH SETTING
TEXT TEST
OBJECT TEST
CHARACTER TEST
MAP TEST
SOUND TEST
EEPROM INITIALIZE

<Test Menu>

1.GAME MODE

Brings you to the game screen for checking.

2.DIP SWITCH SETTING

Allows you to perform input tests, DIP switch setting tests, and monitoring screen checking.

3.TEXT TEST

Allows you to check text to be used during the game.

4.OBJECT TEST

Allows you to check the objects to be used during the game.

5.CHARACTER TEST

Allows you to check the characters to be used during the game.

6.MAP TEST

Allows you to check the maps to be used during the game.

7.SOUND TEST

Allows you to check the sound to be used during the game.

8.EEPROM INITIALIZE

Clears the contents of the SAVE data.

Caution: Selecting this mode clears the backed-up SAVE data and returns to the initial state.

[DIP Switch Settings]

Allows you to perform input tests, DIP switch setting tests, and monitoring screen checking. Selecting this mode on the TEST MENU screen initiates the ROM RAM CHECK. On the screen after the ROM RAM CHECK, pressing the 1P and 2P start buttons simultaneously brings you to the IO CHECK screen.

	DIP SWI	TCH SETTI	NG
	TEST MO		
DIP SWI 1 OFF 2 OFF 3 OFF 4 OFF 5 OFF 6 OFF 7 OFF 8 OFF	TCH 2 START RANK TIMER RANK PLAYER COUNTS EXTRA PLAYER		NORMAL NORMAL 3 2000000 EACH
DIP SWI 1 OFF 2 OFF 3 OFF 4 OFF 5 OFF 6 OFF 7 OFF 8 OFF	SCREEN DEMO S STAGE I CONTINI INVINCII SCORE I	OUND EDIT UE PLAY	OFF
		P & 2P STA	

2.DIP SWITCH SETTING screen

1.IO CHECK screen

Lets you test switches, buttons, and the lever of the machine.

If the screen changes from OFF to ON after you press a switch, a button, and the lever, the machine is verified as normal.

Pressing the 1P and 2P start buttons simultaneously brings you to the DIP SWITCH SETTING screen.

2.DIP SWITCH SETTING screen

Lets you check the settings of the DIP switches on the board, such as the type of coin and the degree of difficulty.

(See the table of DIP switch settings for each setting.)

Caution: Turn off power before changing the setting of any DIP switch.

Check the settings only on the DIP SWITCH SETTING screen.

Pressing the 1P and 2P start buttons simultaneously brings you to the COLOR CHECK screen.

3.COLOR CHECK screen

Allows you to check color shades and brightness of the screen using each color bar.

Adjust the machine screen using the above check results as guidelines.

Pressing the 1P and 2P start buttons simultaneously brings you to the SCREEN CHECK screen.

4.SCREEN CHECK screen

Allows you to check the size and distortion of the screen using the cross-hatched screen. Adjust the machine screen using the above check results as guidelines.

Pressing the 1P and 2P start buttons simultaneously initiates return to the MENU screen.

If you want to return to a normal game screen after checking the test mode, turn off power before turn DIP switch 1-1 on the board OFF, and then turn on power again.

[BATTLE BAKRAID DIP SWITCH]

DIP SWITCH1		1	2	3	4	5	6	7	8	
TEST MODE	NORMAL PLAY	OFF					h Mar			
	TEST PATTERN	ON								
STARTING COIN	1 CREDIT	Property Co.	OFF							
	2 CREDITS	- 4 m/E	ON	DOLDE	15	2.00				
	1 COIN 1 CREDIT			OFF	OFF	OFF				
	1 COIN 2 CREDITS			ON	OFF	OFF				
	1 COIN 3 CREDITS			OFF	ON	OFF	1			
COIN 1	1 COIN 4 CREDITS			ON	ON	OFF	1			
00111	2 COINS 1 CREDIT			OFF	OFF	ON				
,	3 COINS 1 CREDIT	to play 5		ON	OFF	ON	- n.an			
		1000		OFF	ON	ON	1			
				OFF	ON	ON	OFF	OFF	OFF	
	1 COIN 1 CREDIT							OFF	OF	
	1 COIN 2 CREDITS						ON	-	-	
	1 COIN 3 CREDITS						OFF	ON	OFF	
COIN 2	1 COIN 4 CREDITS	1					ON	ON	OF	
	2 COINS 1 CREDIT						OFF	OFF	ON	
to be a family of a fire	3 COINS 1 CREDIT						ON	OFF	ON	
	4 COINS 1 CREDIT			.l			OFF	ON	ON	
FREE PLAY	The state of the s			ON	ON	ON	ON	ON	01	
DEFAULT SETTING		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OF	
DIP SWITCH2	331.43	1	2	3	4	5	6	7	8	
START RANK	NORMAL	OFF	OFF							
(Game start difficulty setting)	EASY	ON	OFF							
(dame start announcy setting)	HARD	OFF	ON							
	VERY HARD	ON	ON	2001		1	6.5			
	If the customer is not playing the			difficulty	setting	ı. it is us	seful to		ALL TO	
	change the game start difficulty t	o an easie	roran	nore diff	icult se	tting.				
TIMER RANK	NORMAL	ANDUS IS	SHAME	OFF	OFF					
(How the difficulty rate	LOW	in door		ON	OFF	30,41		TREA		
increases during the game)	HIGH	and reform		OFF	ON	la H		MAR		
3 3 ,	HIGHEST			ON	ON			hear		
	If the playing time per customer i	If the playing time per customer is to long, it is useful to change the difficulty increase rate to a higher rate and if the playing time is to short to lower the rate.								
DI AVED COLINTO		I the pla	ying tim	0 13 10 1	siloit to	OFF	OFF	1	Se had	
PLAYER COUNTS	3 3 4 5 5 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7						_			
	4					ON	OFF	No. of Street, or other transfer or other transf		
	2					OFF	ON			
	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					ON	ON		F	
EXTRA PLAYER	2,000,000 EACH							OFF	OF	
	3,000,000 EACH							ON	OF	
	4,000,000 EACH							OFF	01	
	NO EXTRA			100	a service	7 70 1		ON	ON	
DEFAULT SETTING		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OF	
DIP SWITCH 3	A Lar House to the buy who commen	. 1	2	3	4	5	6	7	8	
SCREEN FLIP	OFF	OFF	CHEST LE		212		a a	PECS		
	ON	ON	install	A M	1	173		Mad		
DEMO SOUND	ON		OFF	124	HPA:	100	31.90			
	NO SOUND	100	ON	le bou	1 / S 18 s	8 560	HARE	100		
STAGE EDIT	DISABLE	9 10	ortunii i	OFF	A I v	1-50	10125	1671	45	
OTTIGE EDIT	ENABLE	and Service		ON		1	139-22-3	is may	199	
CONTINUE PLAY	ENABLE	A Harris	10100	3,1	OFF	100000	0.21.0	or Day 14		
CONTINUE PLAY	AND AND THE RESERVE AND ADDRESS OF THE PROPERTY OF THE PROPERT	4-4-		A CONTRACTOR OF THE PARTY OF TH	ON	n S	1112	10/2/41	C-03	
INVINCIBLE	DISABLE	a serie de Licov	HOTOHAN	a puct	LOIA	OFF		-		
INVINCIBLE	OFF garden and garden designation		The state of				TO PU	H2		
The State of the S	ON alternative of the party of	16节节400号	REFERENCE.			ON	055			
SCORE RANKING	SAVE						OFF			
	NO SAVE	DE DE ME	W LIGH	1			ON		T ==	
		1						OFF	OF	
NO USE DEFAULT SETTING	Long and a primary of first feet (96)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OF	